FIG. 1

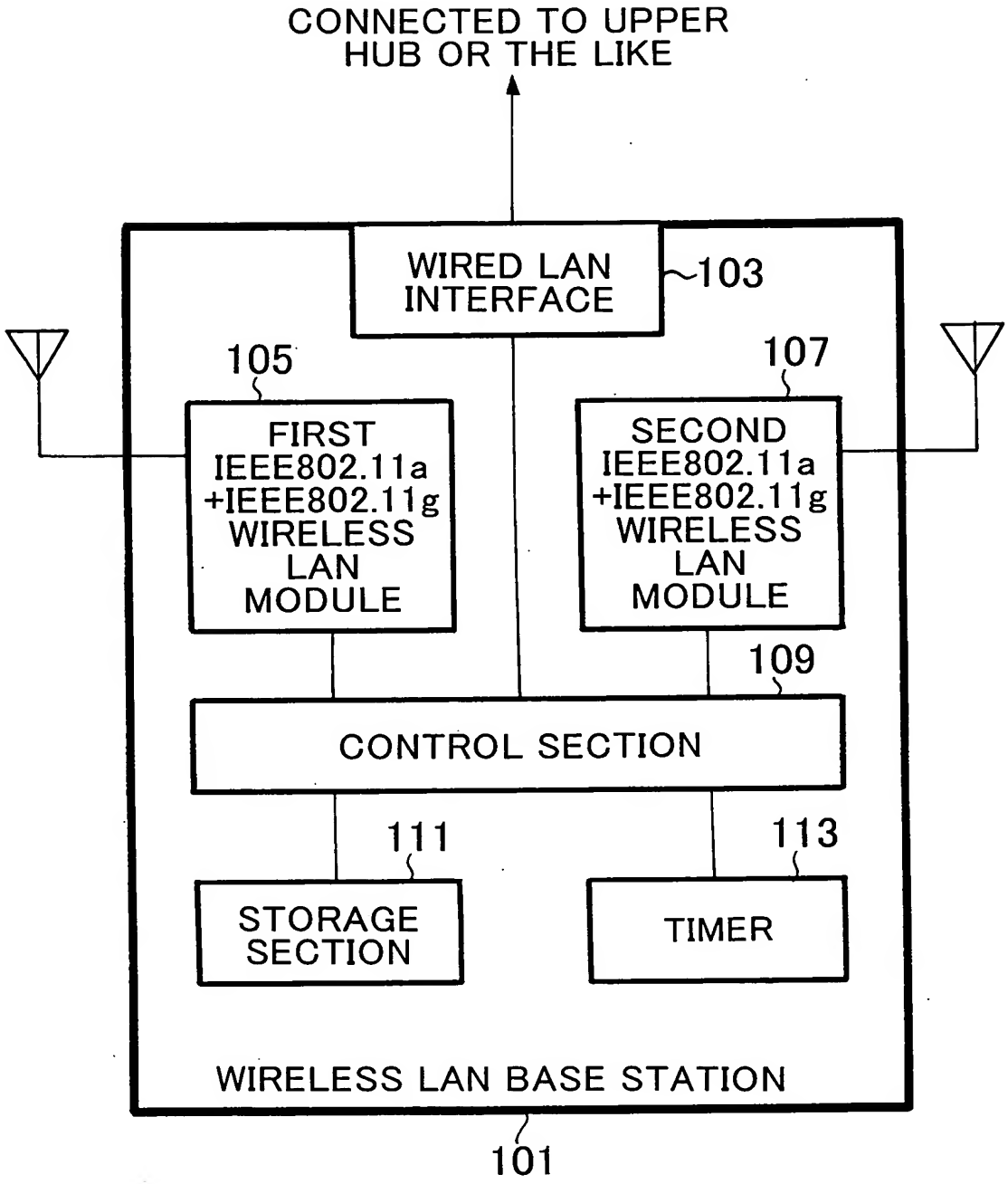

CONNECTED TO UPPER HUB OR THE LIKE
WIRED LAN INTERFACE
103
105
107
FIRST IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
109
CONTROL SECTION
111
113
STORAGE SECTION
TIMER
WIRELESS LAN BASE STATION
101

FIG.2

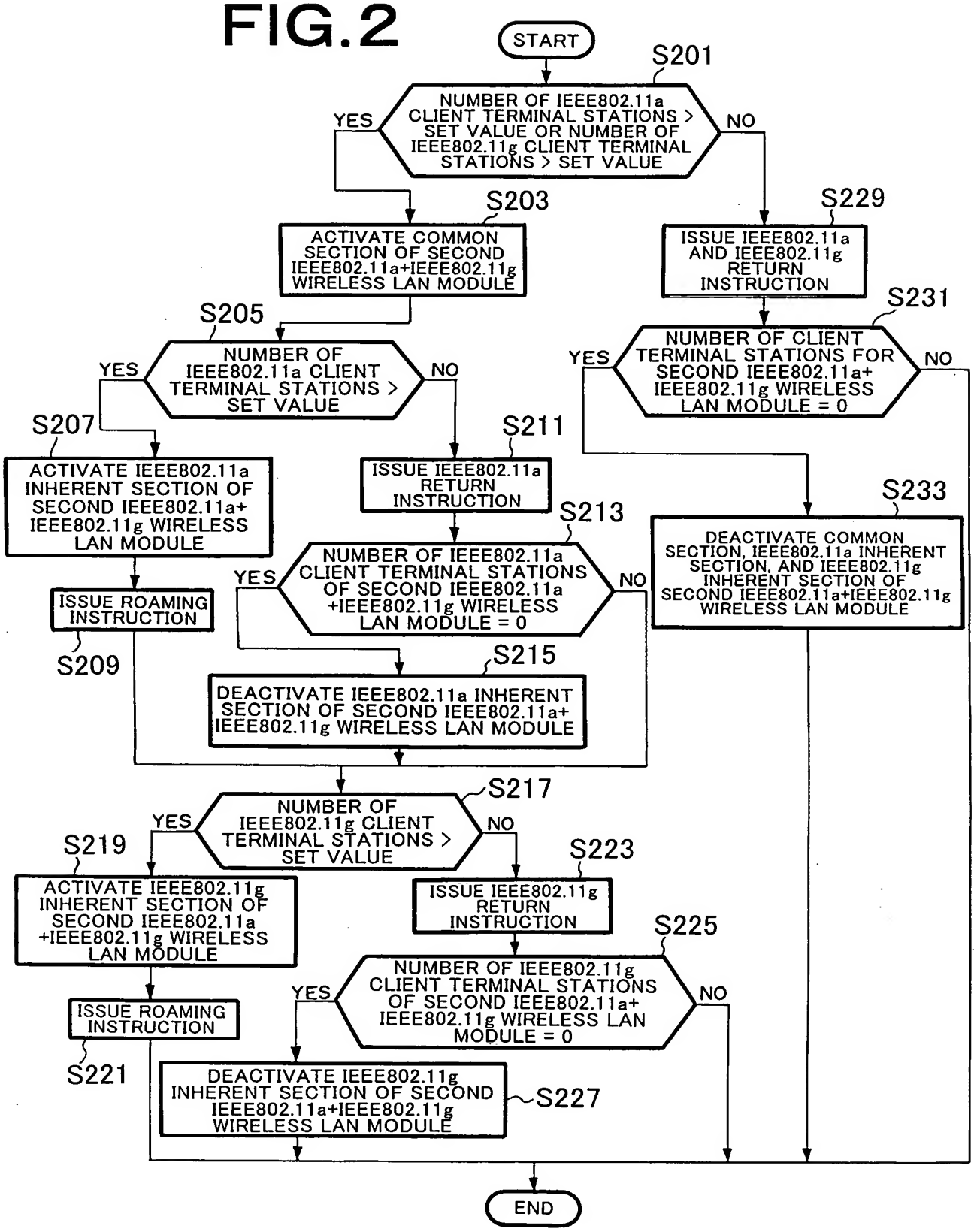

START
S201
NUMBER OF IEEE802.11a CLIENT TERMINAL STATIONS > SET VALUE OR NUMBER OF IEEE802.11g CLIENT TERMINAL STATIONS > SET VALUE
YES
NO
S203
ACTIVATE COMMON SECTION OF SECOND IEEE802.11a+IEEE802.11g WIRELESS LAN MODULE
S229
ISSUE IEEE802.11a AND IEEE802.11g RETURN INSTRUCTION
S205
NUMBER OF IEEE802.11a CLIENT TERMINAL STATIONS > SET VALUE
YES
NO
S231
NUMBER OF CLIENT TERMINAL STATIONS FOR SECOND IEEE802.11a+ IEEE802.11g WIRELESS LAN MODULE = 0
YES
NO
S207
ACTIVATE IEEE802.11a INHERENT SECTION OF SECOND IEEE802.11a+ IEEE802.11g WIRELESS LAN MODULE
S211
ISSUE IEEE802.11a RETURN INSTRUCTION
S233
DEACTIVATE COMMON SECTION, IEEE802.11a INHERENT SECTION, AND IEEE802.11g INHERENT SECTION OF SECOND IEEE802.11a+IEEE802.11g WIRELESS LAN MODULE
S213
NUMBER OF IEEE802.11a CLIENT TERMINAL STATIONS OF SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE = 0
YES
NO
ISSUE ROAMING INSTRUCTION
S209
S215
DEACTIVATE IEEE802.11a INHERENT SECTION OF SECOND IEEE802.11a+ IEEE802.11g WIRELESS LAN MODULE
S217
NUMBER OF IEEE802.11g CLIENT TERMINAL STATIONS > SET VALUE
YES
NO
S219
ACTIVATE IEEE802.11g INHERENT SECTION OF SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
S223
ISSUE IEEE802.11g RETURN INSTRUCTION
S225
NUMBER OF IEEE802.11g CLIENT TERMINAL STATIONS OF SECOND IEEE802.11a+ IEEE802.11g WIRELESS LAN MODULE = 0
YES
NO
ISSUE ROAMING INSTRUCTION
S221
DEACTIVATE IEEE802.11g INHERENT SECTION OF SECOND IEEE802.11a+IEEE802.11g WIRELESS LAN MODULE
S227
END

FIG.3

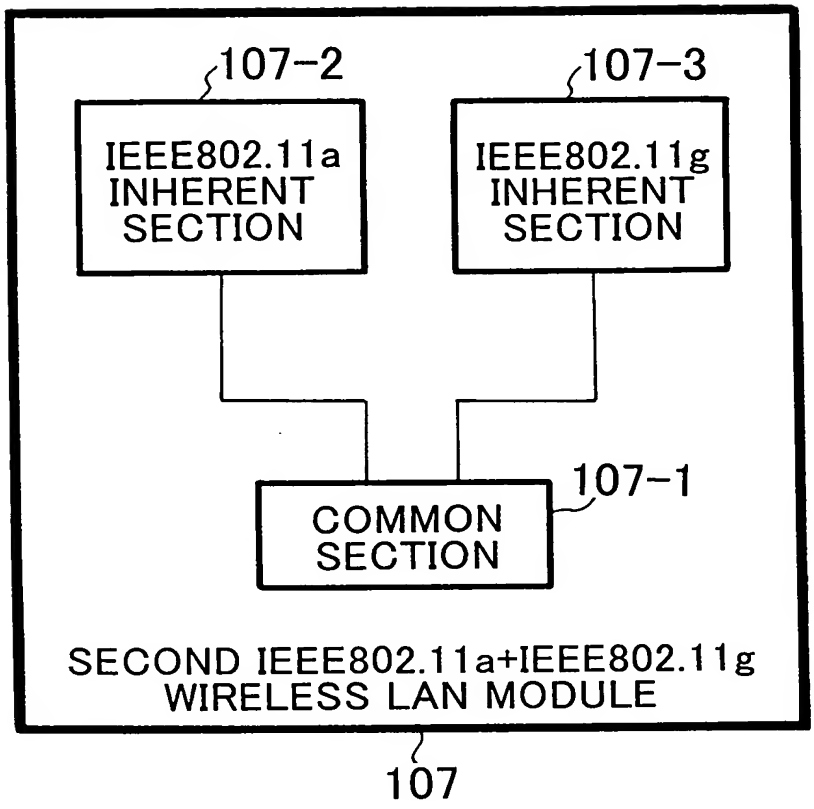

107-2
107-3
IEEE802.11a INHERENT SECTION
IEEE802.11g INHERENT SECTION
107-1
COMMON SECTION
SECOND IEEE802.11a+IEEE802.11g WIRELESS LAN MODULE
107

FIG.4

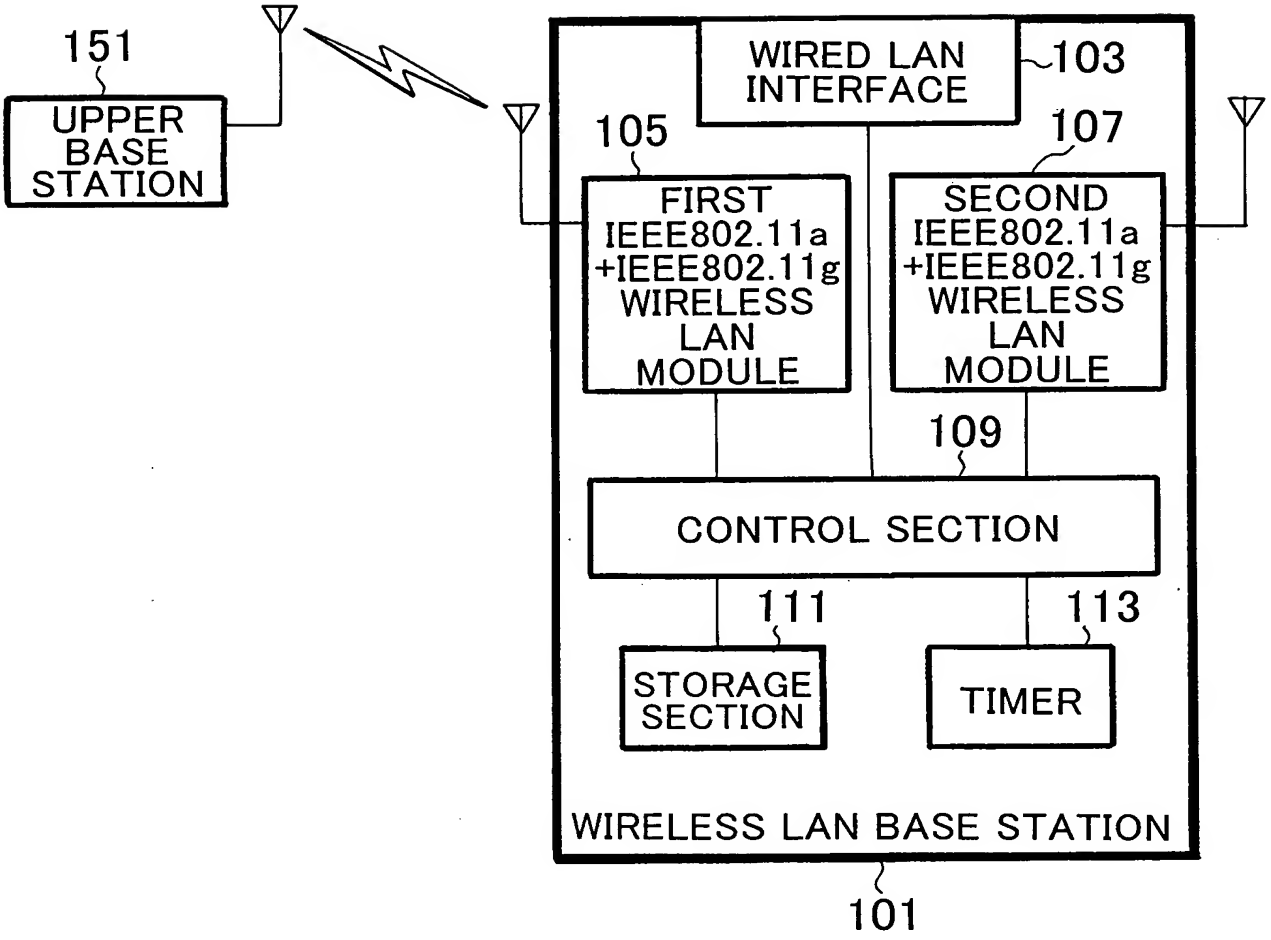

151
UPPER BASE STATION
WIRED LAN INTERFACE
103
105
107
FIRST IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
109
CONTROL SECTION
111
113
STORAGE SECTION
TIMER
WIRELESS LAN BASE STATION
101

FIG.5

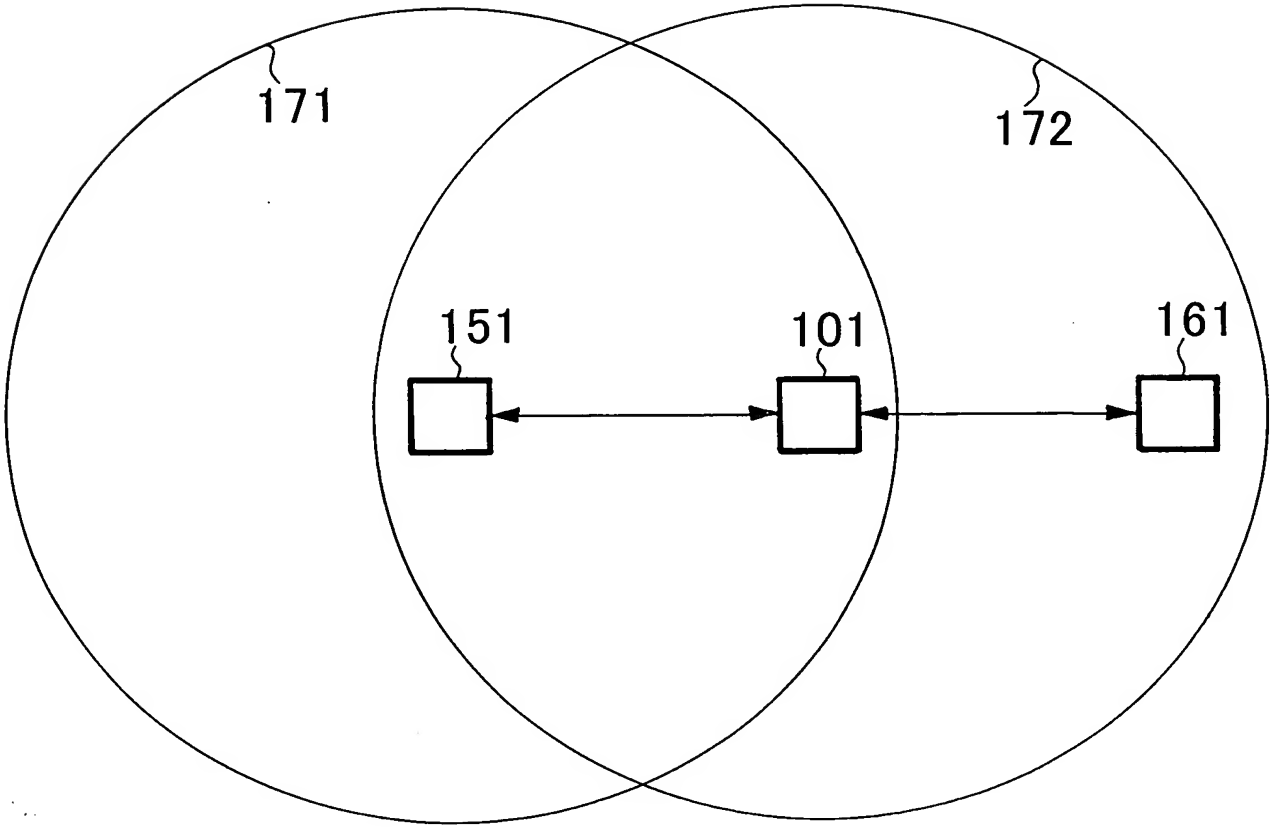


FIG.6

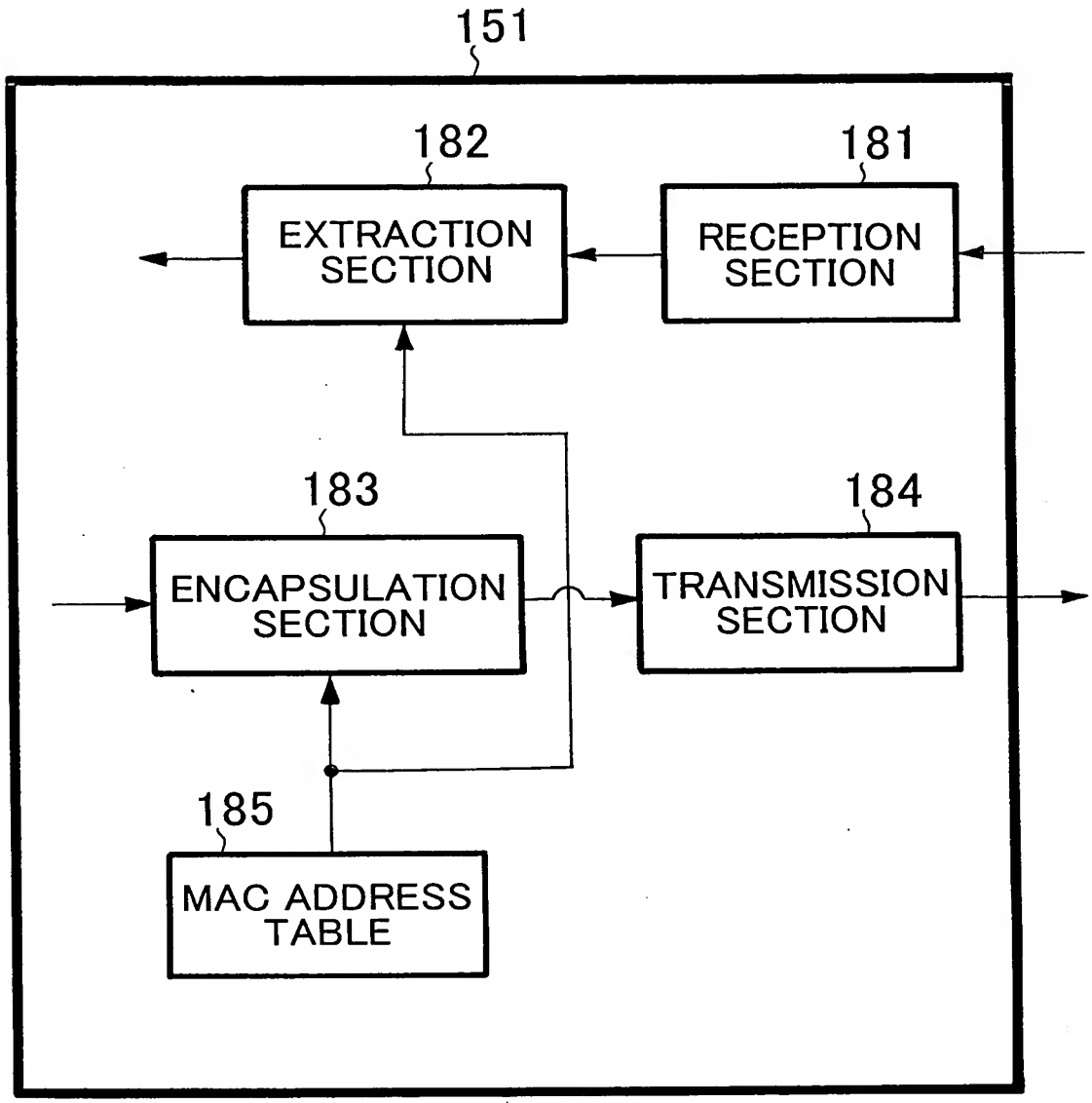

151
182
181
EXTRACTION SECTION
RECEPTION SECTION
183
184
ENCAPSULATION SECTION
TRANSMISSION SECTION
185
MAC ADDRESS TABLE

FIG.7

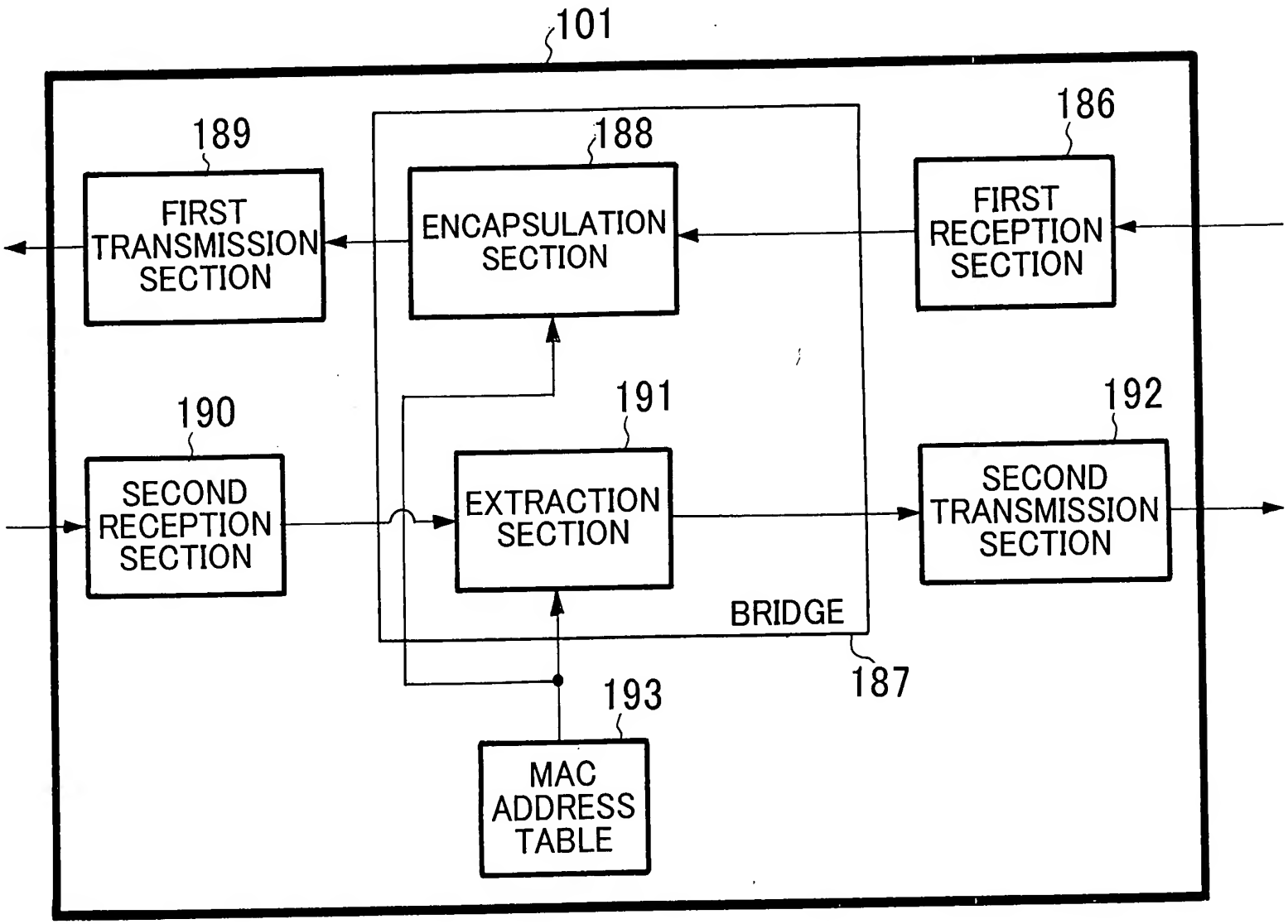

101
189
FIRST TRANSMISSION SECTION
188
ENCAPSULATION SECTION
186
FIRST RECEPTION SECTION
190
SECOND RECEPTION SECTION
191
EXTRACTION SECTION
192
SECOND TRANSMISSION SECTION
BRIDGE
187
193
MAC ADDRESS TABLE

FIG.8

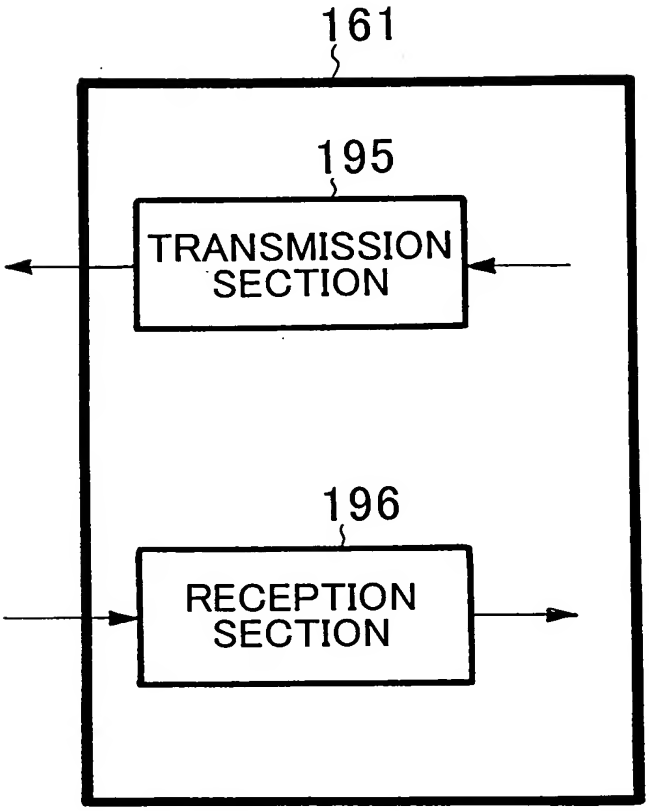


FIG.9

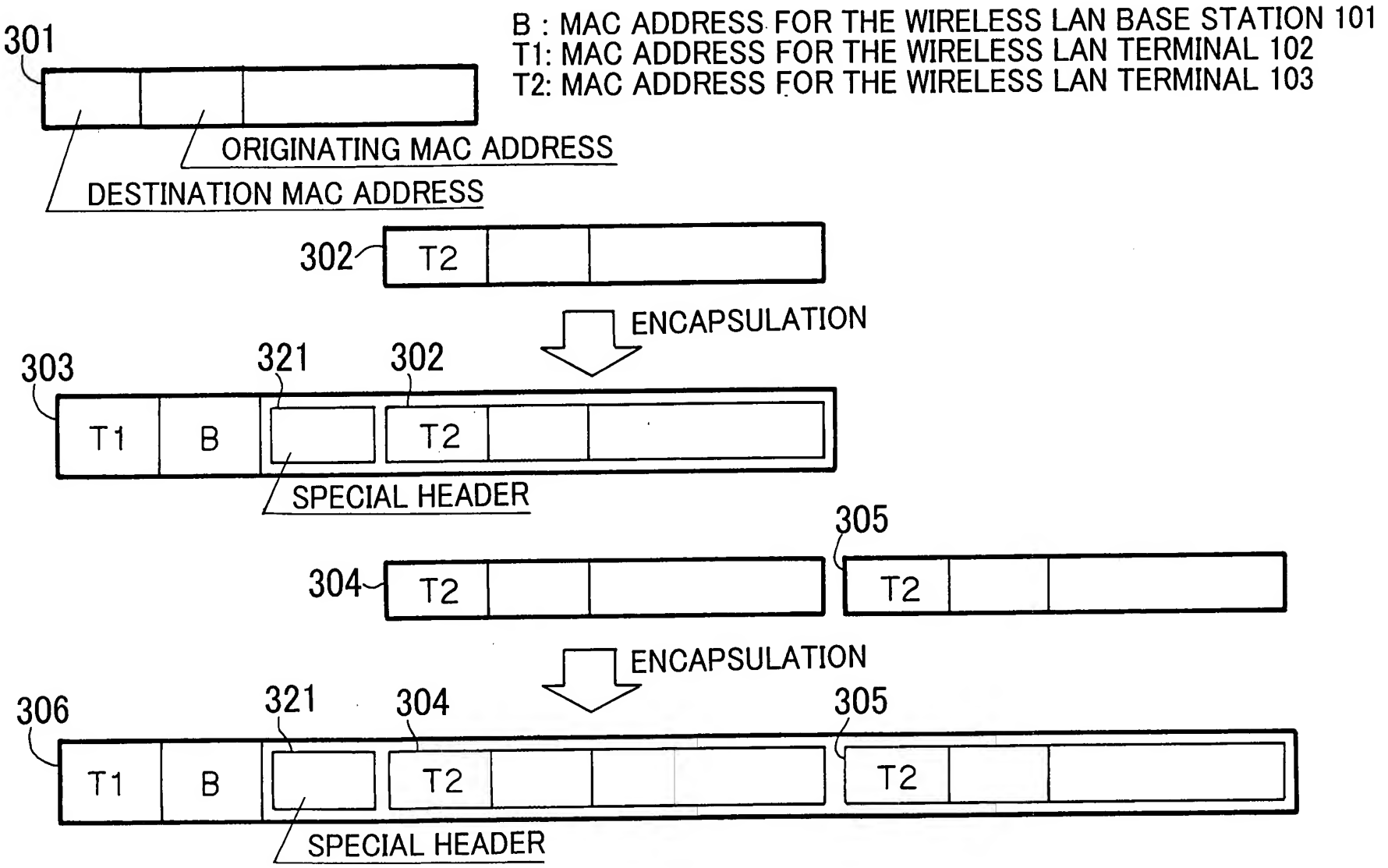

B : MAC ADDRESS FOR THE WIRELESS LAN BASE STATION 101
T1: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 102
T2: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 103
301
ORIGINATING MAC ADDRESS
DESTINATION MAC ADDRESS
302
T2
ENCAPSULATION
303
321
302
T1
B
T2
SPECIAL HEADER
305
304
T2
T2
ENCAPSULATION
306
321
304
305
T1
B
T2
T2
SPECIAL HEADER

FIG.10

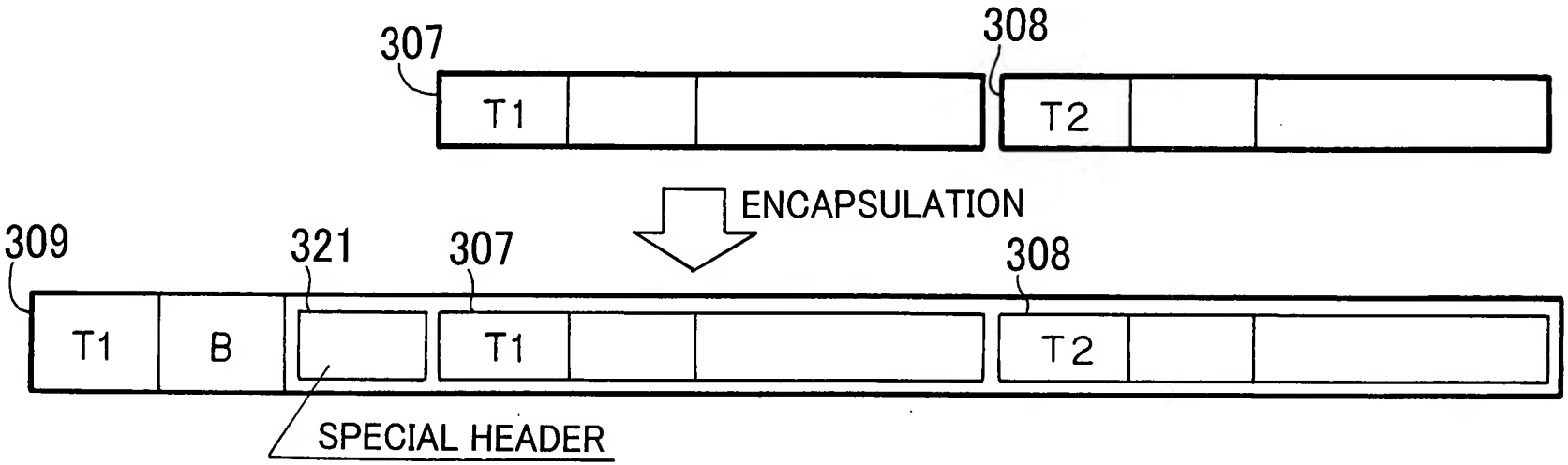

307
308
T1
T2
ENCAPSULATION
309
321
307
308
T1
B
T1
T2
SPECIAL HEADER

FIG.11

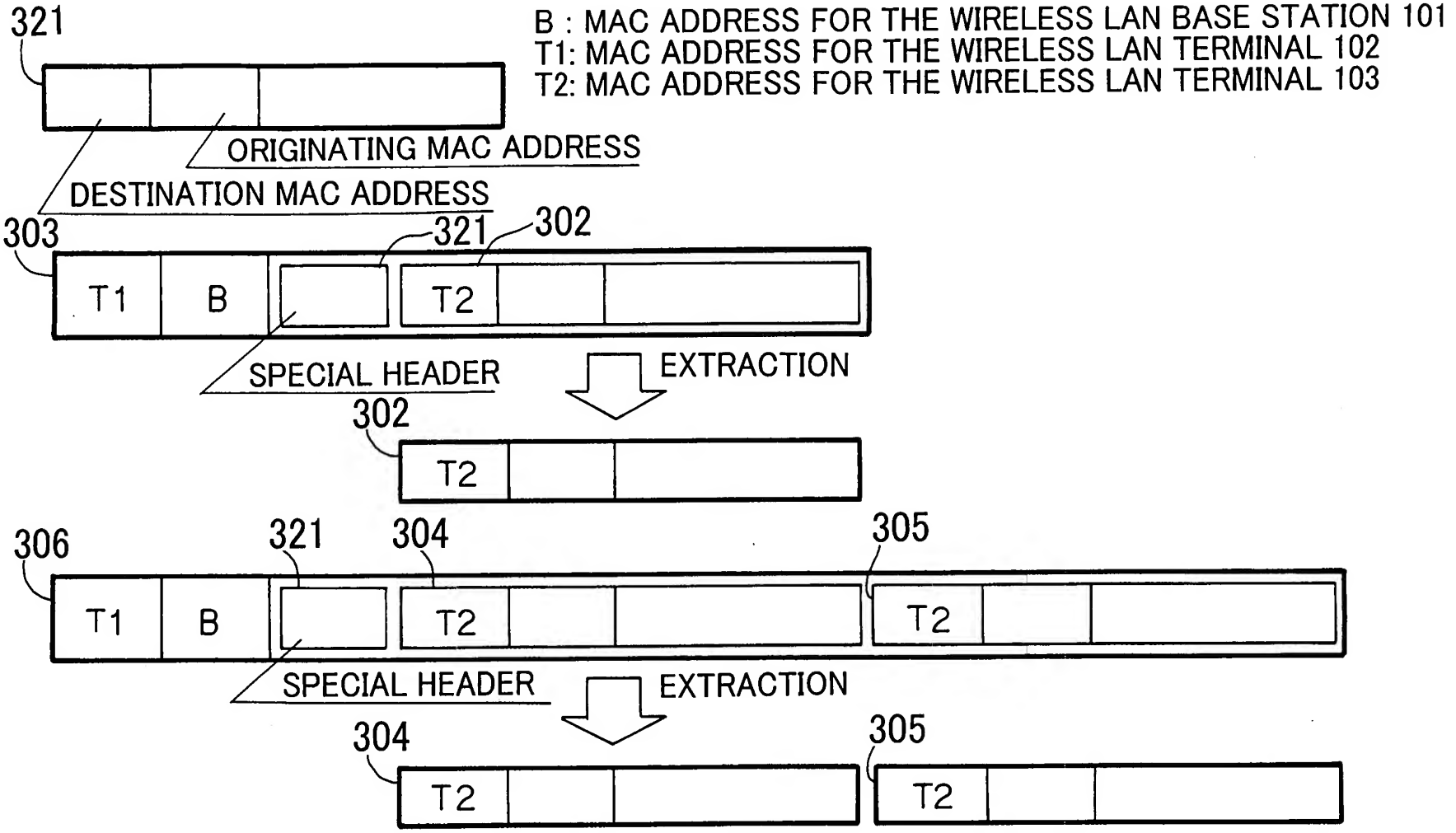

B : MAC ADDRESS FOR THE WIRELESS LAN BASE STATION 101
T1: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 102
T2: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 103
321
ORIGINATING MAC ADDRESS
DESTINATION MAC ADDRESS
303
321
302
T1
B
T2
SPECIAL HEADER
EXTRACTION
302
T2
306
321
304
305
T1
B
T2
T2
SPECIAL HEADER
EXTRACTION
304
305
T2
T2

FIG.12

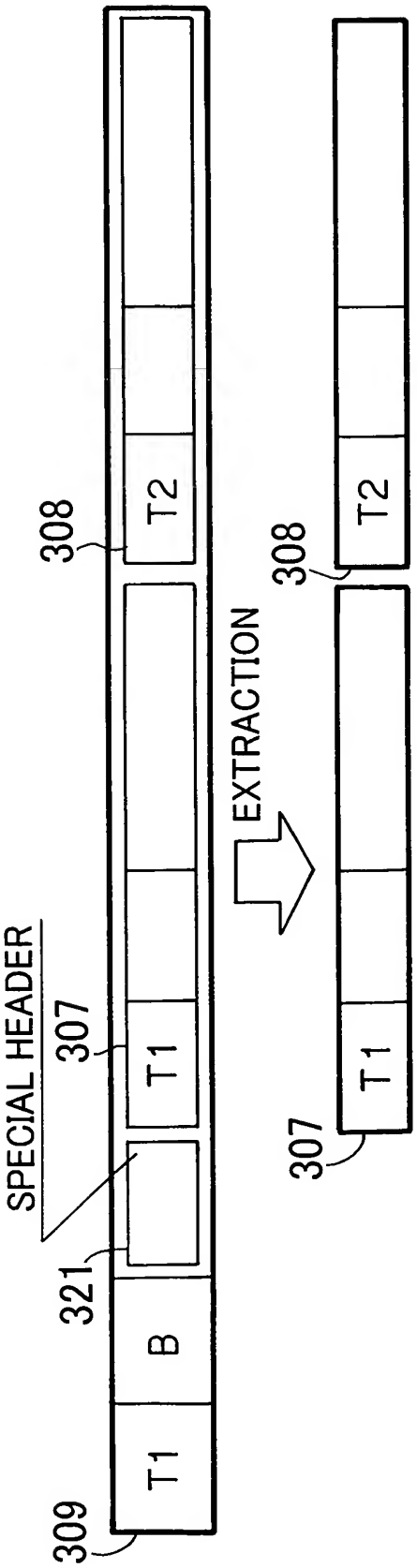

T2
308
T1
307
SPECIAL HEADER
B
321
T1
309
EXTRACTION
T2
308
T1
307

FIG.13

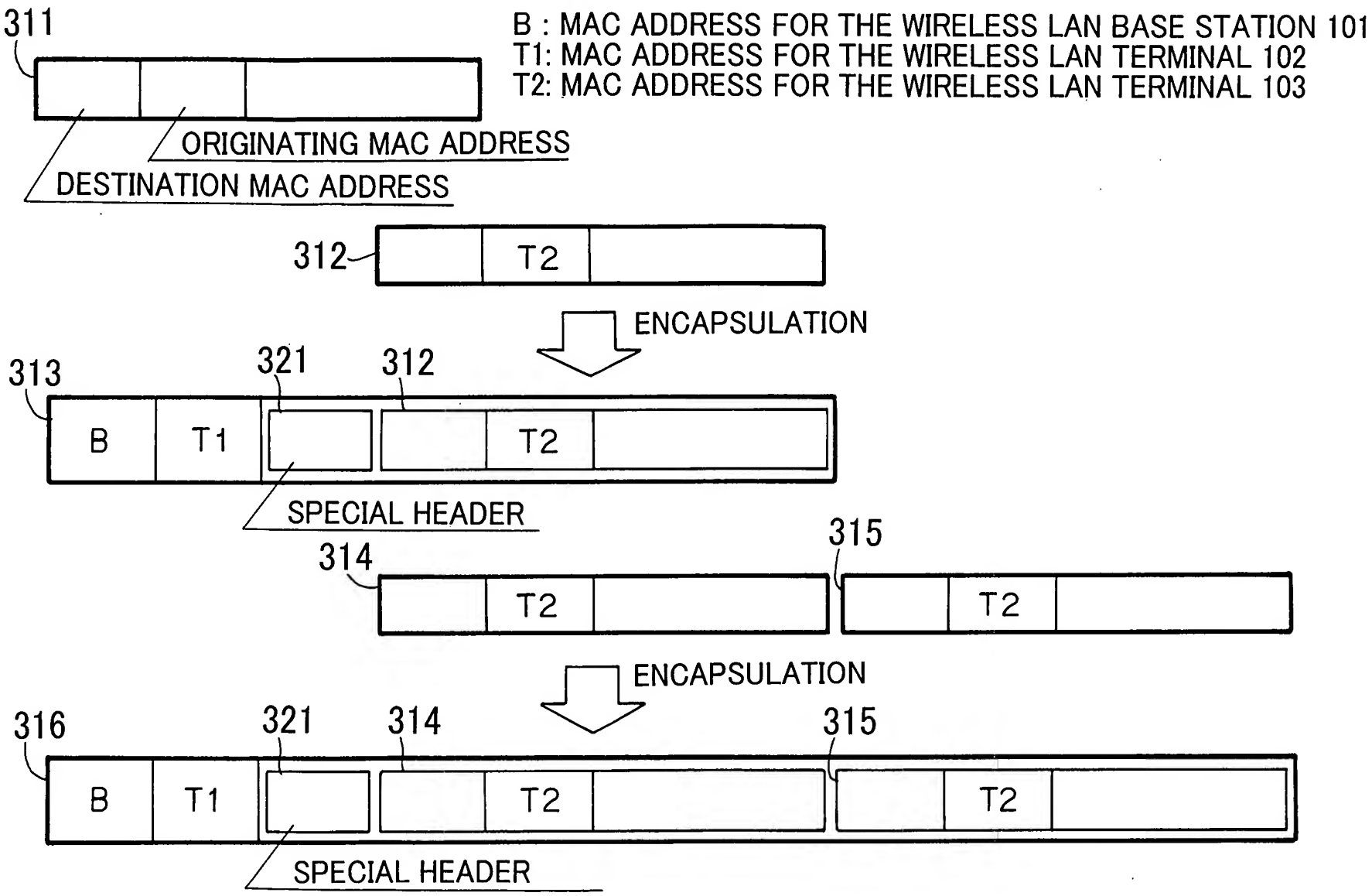

311
B : MAC ADDRESS FOR THE WIRELESS LAN BASE STATION 101
T1: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 102
T2: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 103
ORIGINATING MAC ADDRESS
DESTINATION MAC ADDRESS
312
T2
ENCAPSULATION
313
321
312
B
T1
T2
SPECIAL HEADER
315
314
T2
T2
ENCAPSULATION
316
321
314
315
B
T1
T2
T2
SPECIAL HEADER

FIG.14

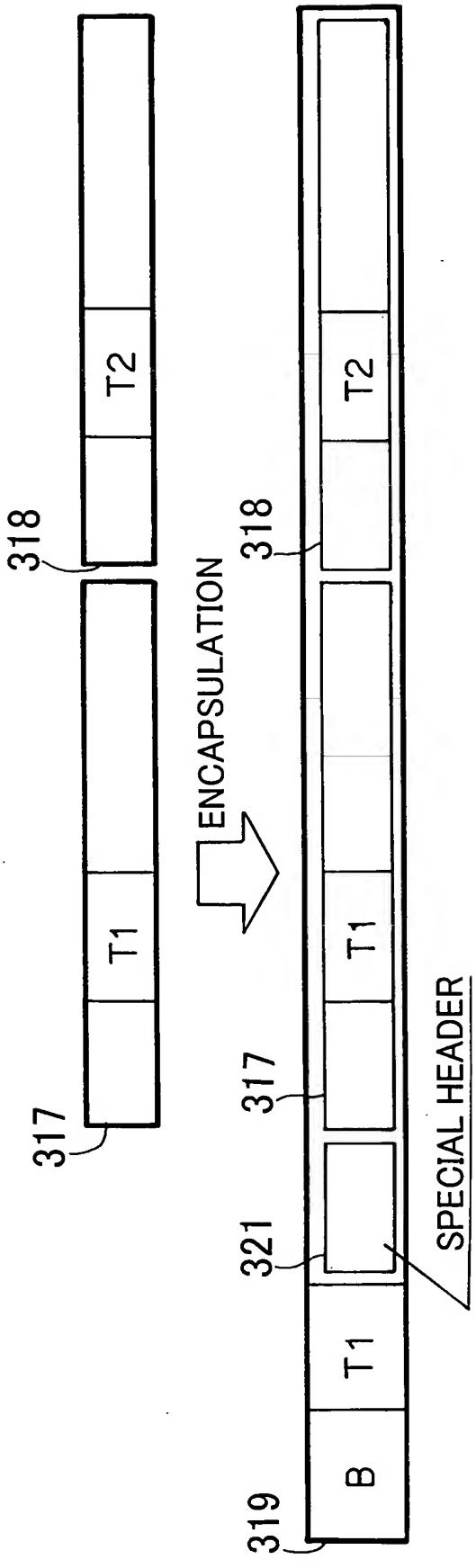

T2
318
T1
317
ENCAPSULATION
318
T2
T1
317
321
SPECIAL HEADER
B
T1
319

FIG.15

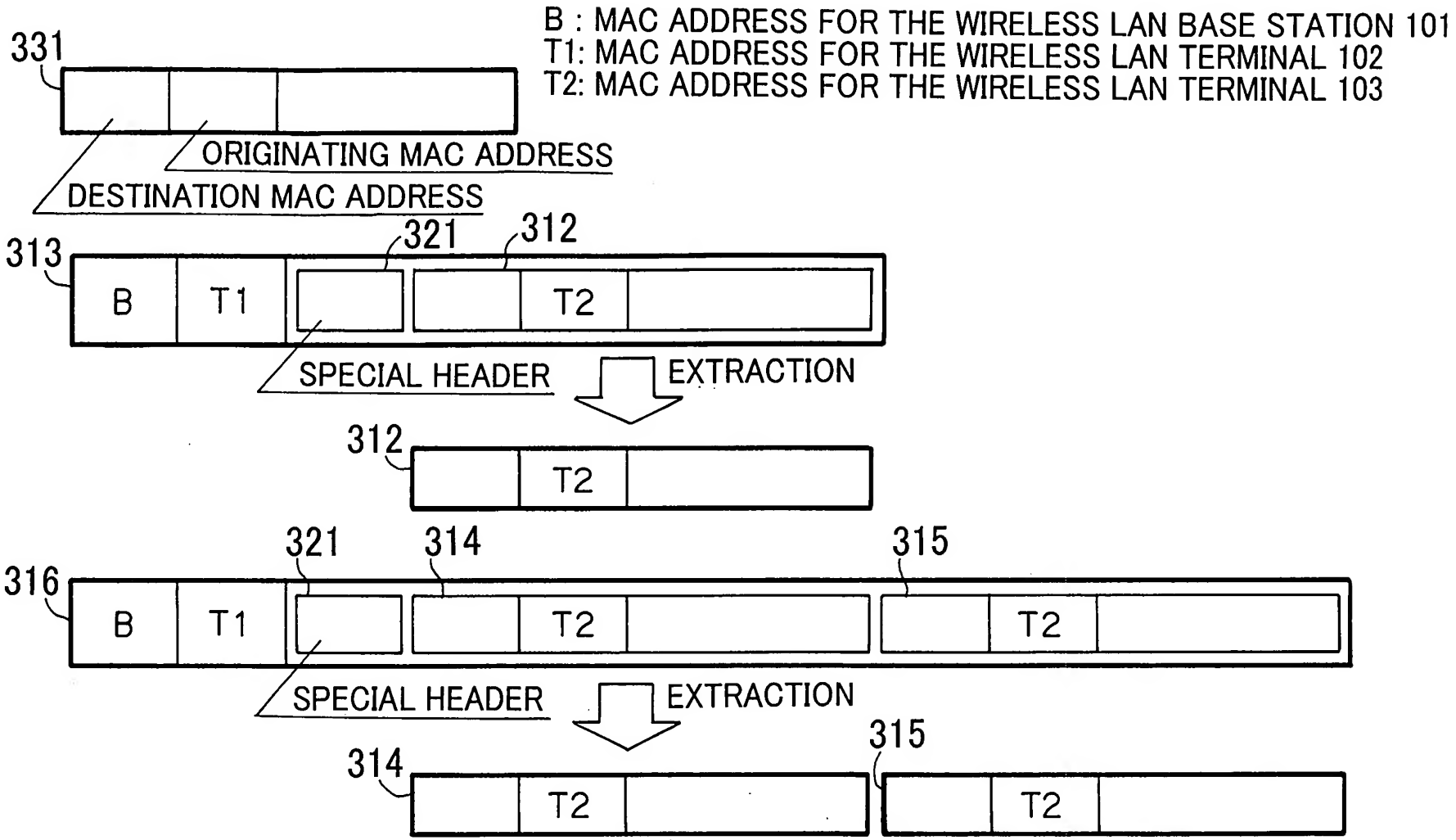

B : MAC ADDRESS FOR THE WIRELESS LAN BASE STATION 101
T1: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 102
T2: MAC ADDRESS FOR THE WIRELESS LAN TERMINAL 103
331
ORIGINATING MAC ADDRESS
DESTINATION MAC ADDRESS
313
321
312
B
T1
T2
SPECIAL HEADER
EXTRACTION
312
T2
316
321
314
315
B
T1
T2
T2
SPECIAL HEADER
EXTRACTION
314
315
T2
T2

FIG.16

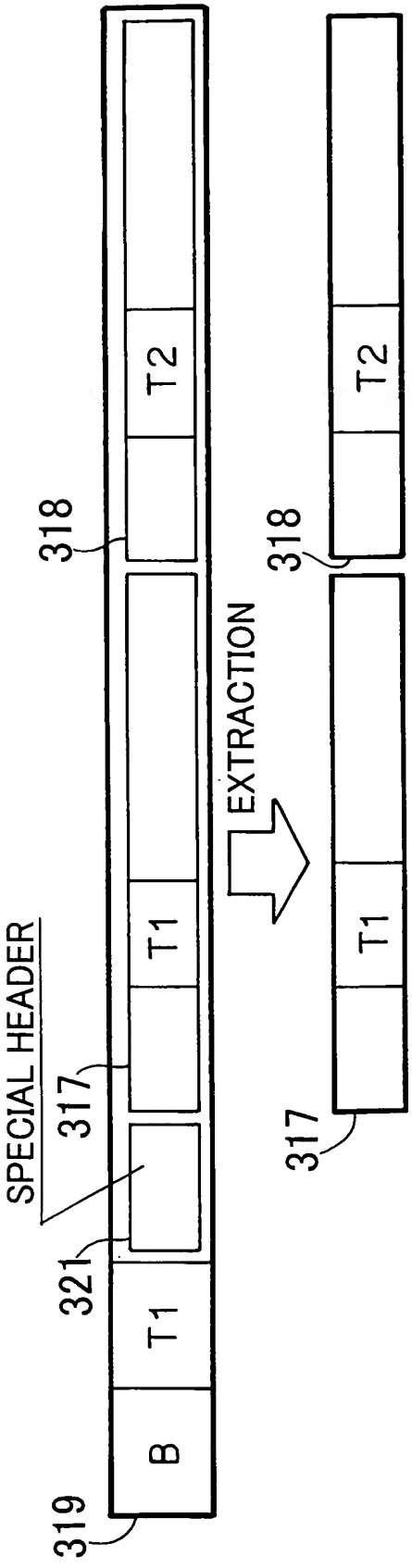

B
T1
T1
T2
319
321
317
318
SPECIAL HEADER
EXTRACTION
T1
T2
317
318

FIG.17

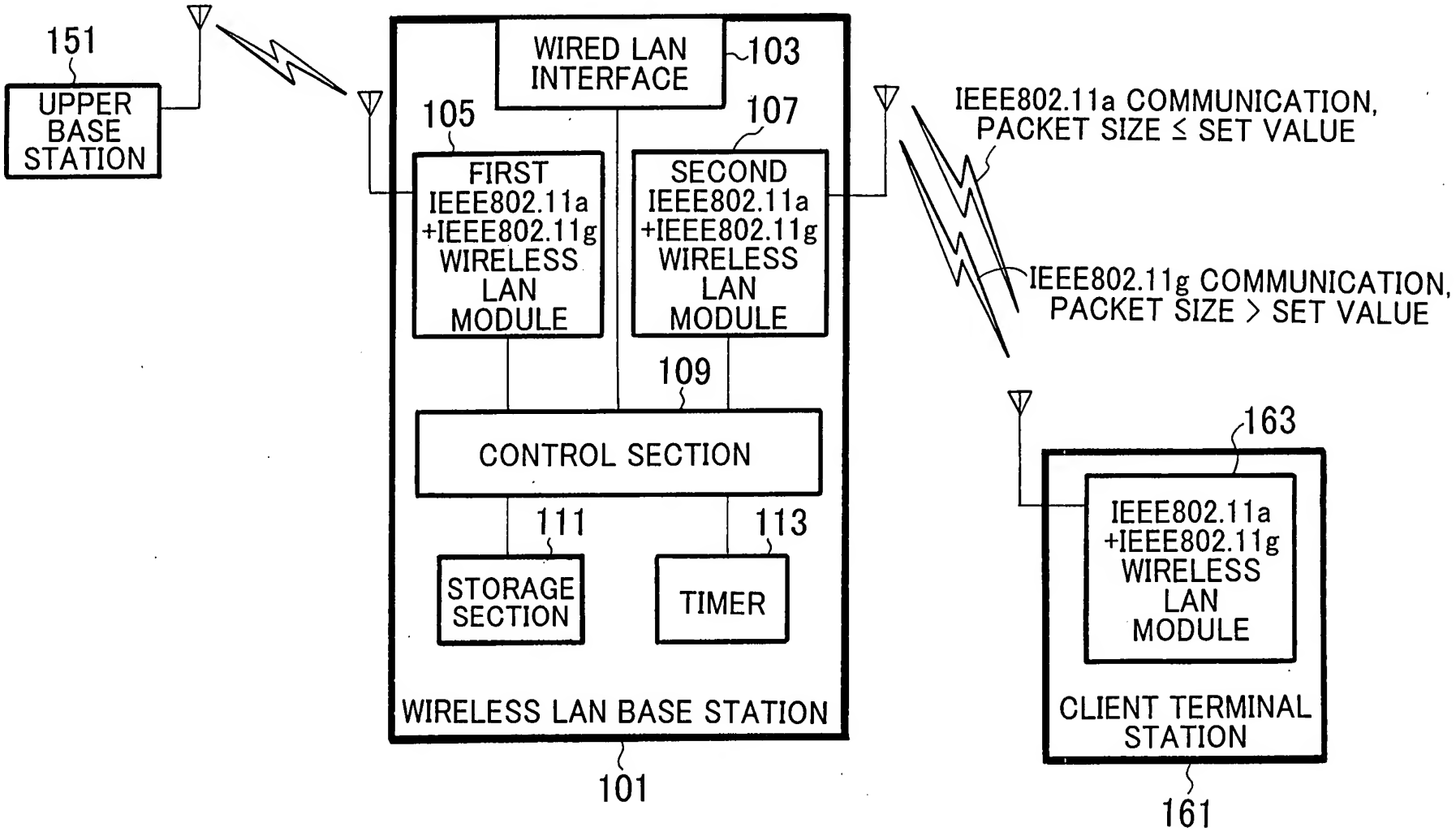
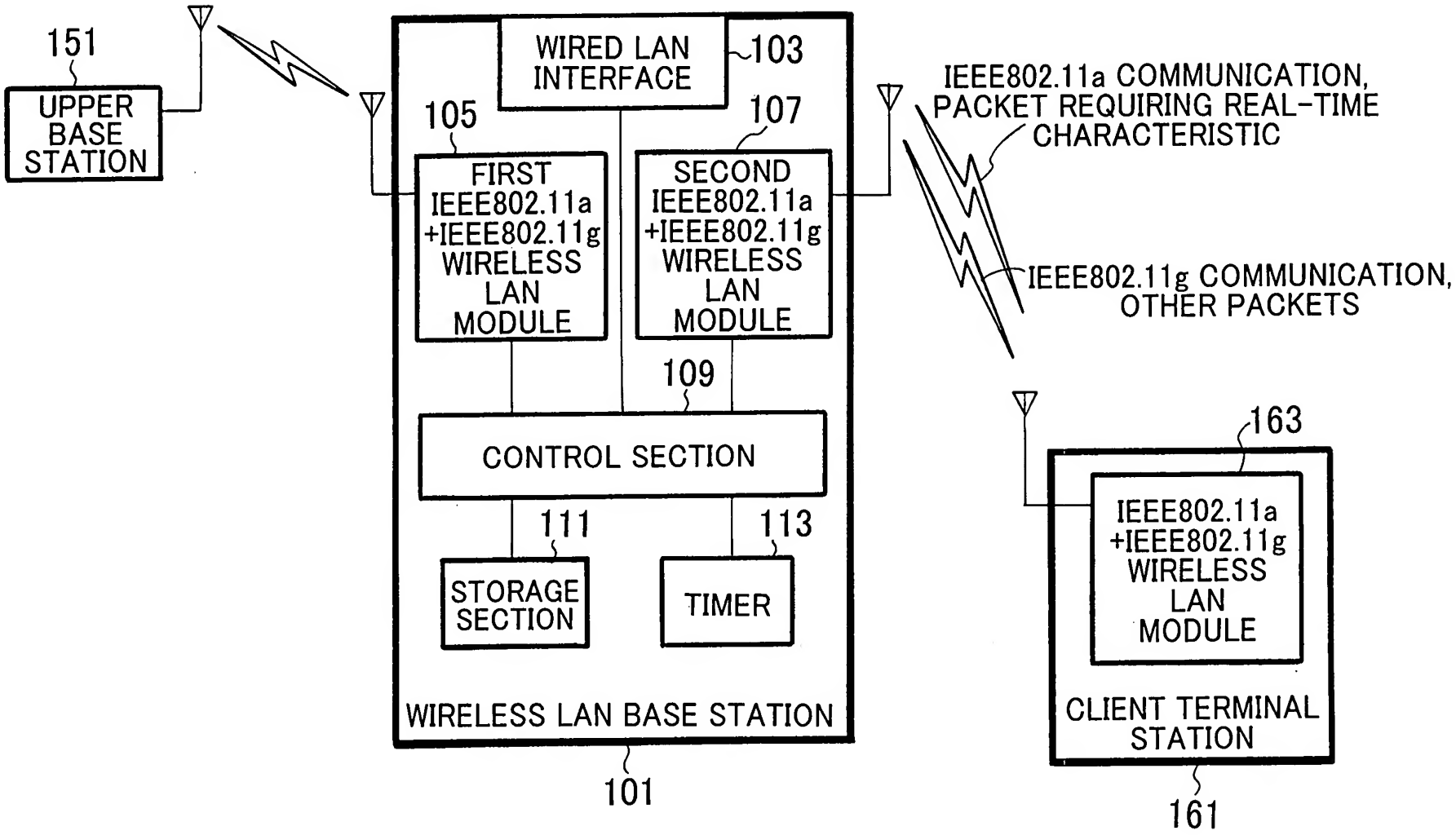

151
UPPER BASE STATION
WIRED LAN INTERFACE
103
105
107
FIRST IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
109
CONTROL SECTION
111
113
STORAGE SECTION
TIMER
WIRELESS LAN BASE STATION
101
IEEE802.11a COMMUNICATION, PACKET SIZE ≤ SET VALUE
IEEE802.11g COMMUNICATION, PACKET SIZE > SET VALUE
163
IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
CLIENT TERMINAL STATION
161

FIG.18


151
UPPER BASE STATION
WIRED LAN INTERFACE
103
105
107
FIRST IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
SECOND IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
109
CONTROL SECTION
111
113
STORAGE SECTION
TIMER
WIRELESS LAN BASE STATION
101
IEEE802.11a COMMUNICATION, PACKET REQUIRING REAL-TIME CHARACTERISTIC
IEEE802.11g COMMUNICATION, OTHER PACKETS
163
IEEE802.11a +IEEE802.11g WIRELESS LAN MODULE
CLIENT TERMINAL STATION
161